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# TACHINID FAUNA (DIPTERA: TACHINIDAE) OF KHABAROVSKII KRAI, RUSSIA

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An annotated checklist of 186 species of Tachinidae (Diptera) of the Russian province Khabarovskii krai is provided. In total, 56 species of Tachinidae are recorded for the first time for Khabarovskii krai, 13 species are new for the Russian Far East and 4 species are firstly recorded for Russia. *Panzeria linguacercus* sp. n. and *Smidtia atribasis* sp. n. are described from the south part of Khabarovskii krai.

KEY WORDS: Diptera, Tachinidae, checklist, new species, Khabarovskii krai, Russia.

# Т. Зейхерс. Фауна мух-тахин (Diptera: Tachinidae) Хабаровского края, Россия // Дальневосточный энтомолог. 2016. N 330. C. 1-28.

Приводится аннотированный список 186 видов мух-тахин (Diptera: Tachinidae) Хабаровского края. Впервые для фауны России указываются 4 вида, для Дальнего Востока — 13 видов и для Хабаровского края — 56 видов. С юга Хабаровского края описаны два новых для науки вида:  $Panzeria\ linguacercus\$ sp. n. и  $Smidtia\ atribasis\$ sp. n.

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#### INTRODUCTION

The family of Tachinidae is one of the most species-rich families of Diptera (Ziegler, 2003; O'Hara, 2012). Tachinid flies are well known for their biology. The larvae develop as parasitoids in insects (and in a few cases other arthropods), caterpillars of Lepidoptera being the most numerous as hosts (Ferrar, 1987; Herting, 1960). Some Tachinidae are of economical importance, since their hosts are considered pests (O'Hara, 2007).

Richter (1986) provided an annotated checklist of the Tachinidae of Khabarovskii krai as part of a checklist for the Russian Far East. She considered the Tachinid fauna of Khabarovskii krai and Amurskaya oblast to be little studied. Ziegler and Shima (1996) gave an annotated checklist for the southern part of the Russian Far East, including Khabarovskii krai. They provided many new records with a focus on Primorskii krai. Richter (2004) provided in a key to the Tachinidae of the Russian Far East distributional information for Khabarovskii krai. Finally, Richter (2005) added one species to the list of Tachinidae from Khabarovskii krai. The fauna of countries in the vicinity have been dealt with by O'Hara (2009) (China) and Draber-Mońko (2008, 2011, 2012) (North Korea).

As for the definition of Khabarovskii krai, we follow Lehr (2004). Hence, Yevreyskaya autonomnaya oblast [Yewish Autonomous region] is included. In practice, nearly all records are from the southern half of the krai [south of river Tugur, region 6 in Lehr (2004)]. The northern half is hardly investigated. Ziegler and Shima (1996) divide the region into a part west of the Amur River ("Amuria") and east of the Amur ("Ussuria"). Amuria also contained Amurskaya oblast, Ussuria also Primorskii krai. Hence, to determine whether their records fall within Khabarovskii krai or not, one needs return to the original data. The division along the Amur River seems unnatural from an ecological point of view, since both banks are quite similar. According to most Russian authors, the territory of Khabarovskii krai falls within one zoogeographical region, though these authors differ on the interpretation of the borders (see Martynenko, 2007 for a review). Of course, using administrative boundaries is artificial as well and first and foremost a matter of convenience. The data provided by Richter (2004) are based on this system and hence form an important source for this checklist. Several species previously mentioned in the literature are not repeated by Richter (2004). In some cases, this is due to new insights, for instance the records of Buquetia musca Robineau-Desvoidy, 1847 proved to be B. intermedia (Baranov, 1939). In most cases, however, the reason for these omissions is unclear.

#### MATERIAL AND METHODS

This review of the Tachinidae of Khabarovskii krai is largely based on the results of the combined international-Russian dipterological trip to the region in June 2013 (see also Mutin *et al.*, 2016). Most visited localities are in the vicinity of Komsomolsk-na-Amure or Tumnin Spa. In total, 13 localities have been visited, as listed in Table 1. Collecting to took place with conventional insect nets. Several malaise

Table 1. List of localities visited in 2013.

No	Date	Locality	Latitude	Longitude
I	9.VI 2013	100 km S Komsomolsk	48° 45' N	135° 52' E
II	10.VI 2013	Amur banks 30 km NNE Komsomolsk	50° 43' N	137° 21' E
III	10.VI 2013	Komsomolsk city park	50° 34' N	137° 03' E
IV	11.VI 2013	Lake Amut 53 km W Komsomolsk	50° 48' N	136° 23' E
V	12.VI 2013	forest lake near Komsomolsk	50° 40' N	136° 52' E
VI	12.VI 2013	peat bog 30 km WNW Komsomolsk	50° 49' N	136° 57' E
VII	14.VI 2013	Tumnin Spa "Rodnik"	49° 39' N	140° 00' E
VIII	14.VI 2013	Tumnin Spa, hilltopping	49° 40' N	139° 59' E
IX	14-15.VI 2013	Tumnin Spa, Malaise trap	49° 39' N	140° 00' E
X	15.VI 2013	Tumnin river bank downstream village	49° 38' N	140° 05' E
XI	16.VI 2013	Cape Dyanka near Vanino	49° 12' N	140° 20' E
XII	17.VI 2013	road Komsomolsk – Khabarovsk	50° 16' N	137° 30' E
XIII	18.VI 2013	Khor river SE Khabarovsk	47° 52' N	135° 30' E

traps were active at Tumnin Spa in 14–15 June 2013. Other material investigated concerns specimens of *Phryno* Robineau-Desvoidy, 1830 collected by Lange & Ziegler in Ussuri. Abbreviations of collectors are as follows: CL – Christiane Lange; CLJZ – Christiane Lange & Joachim Ziegler; WvS – Wouter van Steenis, XM – Ximo Mengual, TZ – Theo Zeegers. The checklist is ordered by subfamily. Within each subfamily, species are given in alphabetical order. For nomenclature, Herting (1984) is followed in principle, with some inevitable nomenclatural changes applied, for instance *Panzeria* Robineau-Desvoidy, 1830 instead of *Ernestia* Robineau-Desvoidy, 1830 (O'Hara & Wood, 2004).

All material is in the private collection of the author, unless indicated otherwise. For the collections, I use the following acronyms in accordance with Evenhuis (2016): CJZB – Private collection of Joachim Ziegler, Bernau, Germany; CTZS – Private collection of Theo Zeegers, Soest, the Netherlands; SDEI – Deutsches Entomologisches Institut, Müncheberg, Germany; ZFMK – Zoologisches Forschungsmuseum "Alexander Köning", Bonn, Germany; ZMHB – Museum für Naturkunde der Humboldt Universität, Berlin, Germany.

# CHECKLIST OF TACHINIDAE OF KHABAROVSKII KRAI WITH DESCRIPTION OF NEW TAXA

Family Tachinidae Subfamily Dexiinae

# 1. Athrycia subcincta (Zetterstedt, 1844)

MATERIAL. **IV** - 1  $\circlearrowleft$  (TZ); **V** - 1  $\circlearrowleft$  (TZ); **IX** - 3  $\circlearrowleft$  (WvS). NOTES. Previously considered synonymous with *A. trepida* (Herting, 1984).

# 2. Athrycia trepida (Meigen, 1824).

MATERIAL. III - 1  $\circlearrowleft$  (TZ); XIII - 1  $\circlearrowleft$  (TZ).

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996), however, the species might have been mixed up with *A. subcincta*.

#### 3. Billaea impigra Kolomiets, 1966

NOTES. Recorded for Khabarovskii krai by Richter (2004).

# 4. Blepharomyia foliacea Mesnil, 1975

NOTES. Recorded for Khabarovskii krai by Richter (2004).

# 5. Campylochaeta similis Ziegler et Shima, 1996.

MATERIAL. **IX** -  $2 \circlearrowleft (WvS)$ .

NOTES. Paratype from Khabarovskii krai (Ziegler & Shima, 1996), however, not mentioned by Richter (2004).

# 6. Chaetoptilia puella (Rondani, 1862)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### 7. Cyrtophleba ruricola (Meigen, 1824)

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 8. Cyrtophleba vernalis (Kramer, 1917)

MATERIAL. III - 1  $\circlearrowleft$  (TZ); IX - 4  $\circlearrowleft$  (WvS).

NOTES. First record for Asian part of Russia.

# 9. Dexia vacua (Fallén, 1817)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

### 10. Dexia ventralis Aldrich, 1925

MATERIAL. **XIII** -  $1 \circlearrowleft$  (WvS).

NOTES. First record for Khabarovskii krai.

#### 11. Dinera carinifrons (Fallén, 1817)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### 12. Dufouria nova Mesnil, 1968

MATERIAL. **XIII** -  $1 \circlearrowleft (TZ)$ .

NOTES. First record for Khabarovskii krai.

#### 13. Estheria magna (Baranov, 1935)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

#### 14. Eulasiona zimini Mesnil, 1963

NOTES. Holotype from Khabarovskii krai (Mesnil, 1963).

#### 15. Halidaya aurea Egger, 1856

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 16. Hyleorus elatus (Meigen, 1838)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### 17. Phyllomyia volvulus (Fabricius, 1794)

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 18. Prosena siberita (Fabricius, 1775)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 19. Thelaira nigripes (Fabricius, 1794)

MATERIAL.  $\hat{\mathbf{X}} - \hat{\mathbf{1}} \, \mathcal{O}$  (TZ).

NOTES. First record for Khabarovskii krai.

#### 20. Thelaira solivaga (Harris, 1780)

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 21. Voria ruralis (Fallén, 1810)

MATERIAL. **VI** - 1  $\Diamond$  (TZ); **XIII** - 1  $\Diamond$  (TZ).

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 22. Wagneria gagatea Robineau-Desvoidy, 1830

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### **Subfamily Exoristinae**

# 23. Acemyia acuticornis (Meigen, 1824)

MATERIAL. III - 1 ♂ (TZ).

NOTES. First record for the Russian Far East.

# 24. Acemyia rufitibia (von Roser, 1840)

MATERIAL. IV -  $1 \circlearrowleft$ ,  $1 \circlearrowleft$  (TZ).

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### 25. Admontia grandicornis (Zetterstedt, 1849)

NOTES. Recorded for Khabarovskii krai by Kolomiets (1977).

# 26. Admontia seria (Meigen, 1824)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 27. Aplomyia confinis (Fallén, 1820)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 28. Bessa parallela (Meigen, 1824)

MATERIAL. IX -  $2 \stackrel{\frown}{Q}$  (WvS).

NOTES. First record for Khabarovskii krai.

#### 29. Blepharipa pratensis (Meigen, 1824)

NOTES. Recorded for Khabarovskii krai by Kolomiets (1977).

# 30. Blepharipa schineri (Mesnil, 1939)

MATERIAL. I - 1  $\supseteq$  (TZ).

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 31. Blondelia siamensis (Baranov, 1938)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

#### 32. Bothria frontosa (Meigen, 1824)

NOTES. Recorded for Khabarovskii krai by Kolomiets (1977).

#### 33. Buquetia intermedia (Baranov, 1939)

NOTES. Recorded for Khabarovskii krai by Richter (1993).

# 34. Carcelia bombylans Robineau-Desvoidy, 1830.

MATERIAL. II - 1  $\circlearrowleft$  (TZ); VI - 1  $\circlearrowleft$  (TZ).

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 35. Carcelia gnava (Meigen, 1824)

MATERIAL. II - 1  $\circlearrowleft$  (TZ); VI - 1  $\circlearrowleft$  (TZ).

NOTES. First records for Khabarovskii krai.

# 36. Carcelia laxifrons Villeneuve, 1912

MATERIAL. II -  $1 \circlearrowleft$  (TZ).

NOTES. First record for Russian Far East.

# 37. Carcelia matsukerehae (Shima, 1969)

MATERIAL. **XII** - 2  $\circlearrowleft$  (TZ). These specimens seem to be aberrant in having 2 antero-dorsal setae on mid tibia, hence, the identification is tentative.

NOTES. Recorded for Khabarovskii krai by Richter (1986), however, not mentioned by Richter (2004).

#### 38. Carcelia tibialis (Robineau-Desvoidy, 1863)

MATERIAL. **IV** - 1  $\circlearrowleft$  (TZ); **XII** - 2  $\circlearrowleft$ , 1  $\circlearrowleft$  (TZ).

NOTES. First records for Khabarovskii krai.

# 39. Ctenophorinia adiscalis Mesnil, 1963

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 40. Ctenophorinia christianae Ziegler et Shima, 1996

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996), but not mentioned by Richter (2004).

#### 41. Ctenophorinia frontalis Ziegler et Shima, 1996

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 42. Ctenophorinia grisea Mesnil, 1967

MATERIAL. II - 2  $\updownarrow$  (TZ, XM); VI - 1  $\circlearrowleft$ , 3  $\updownarrow$  (TZ); XII - 2  $\updownarrow$  (TZ); XIII - 1  $\circlearrowleft$  (TZ).

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996), but not mentioned by Richter (2004).

#### 43. Dolichocolon sp.

NOTES. Recorded for Khabarovskii krai by Richter (1981) as *Dolichocolon paradoxum* Brauer et Bergenstamm, 1889. Cerretti & Shima (2011) doubt whether this identification is correct: it is likely to refer to another species of *Dolichocolon*.

#### 44. Dolichocoxys rossica Mesnil, 1963.

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 45. Drino lota (Meigen, 1824)

MATERIAL. **XII** -  $1 \circlearrowleft (TZ)$ .

NOTES. First record for Khabarovskii krai.

#### 46. Erythrocera sp.

MATERIAL. II - 1  $\circlearrowleft$  (TZ); III - 1  $\circlearrowleft$  (TZ); XIII - 1  $\hookrightarrow$  (TZ).

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996). The genus is in need of revision and females cannot be identified at the moment.

#### 47. Eumea mitis (Meigen, 1824)

MATERIAL. VII - 1  $\stackrel{\frown}{2}$  (TZ); IX - 1  $\stackrel{\frown}{0}$  (WvS).

NOTES. First records for Khabarovskii krai.

# 48. Eumea linearicornis (Zetterstedt, 1844)

NOTES. Recorded for Khabarovskii krai by Kolomiets (1977) as *Platymyia westermanni* Ztt., however, not mentioned by Richter (1986, 2004). This record might refer to *Eumea mitis*.

# 49. Exorista fasciata (Fallén, 1820)

MATERIAL. VI - 1 3 (TZ).

NOTES. Recorded for Khabarovskii krai by Kolomiets (1977), but not mentioned by Richter (2004).

#### 50. Exorista larvarum (Linnaeus, 1758)

MATERIAL. III - 1 ♂ (XM) [col. ZFMK].

NOTES. Recorded for Khabarovskii krai by Kolomiets (1977), but not mentioned by Richter (2004).

# 51. Exorista mimula (Meigen, 1824),

MATERIAL. III - 1  $\circlearrowleft$  (TZ); XIII - 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (WvS).

NOTES. Possibly recorded for Khabarovskii krai by Kolomiets (1977) as *E. verax* R.-D. (Ziegler & Shima, 1996), not mentioned by Richter (2004).

# 52. Exorista rustica (Fallén, 1810)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### 53. Frontina sp.

NOTES. Recorded for Khabarovskii krai by Richter (1986) as *Frontina laeta* (Meigen, 1824). In the light of several new species described from Japan by Shima (1988), this record needs to be reviewed.

#### 54. Gonia divisa Meigen, 1826

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 55. Gonia ornata Meigen, 1826

MATERIAL. **X** - 1  $\cite{1}$  (XM) [col. ZFMK]. This female lacks red markings on the abdomen.

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 56. Gonia ussuriensis (Rohdendorf, 1928)

MATERIAL. II - 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (TZ).

NOTES. First record for Khabarovskii krai.

# 57. Hebia flavipes Robineau-Desvoidy, 1830

MATERIAL. IV - 1 & (TZ).

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 58. Istochaeta hemichaeta (Brauer et Bergenstamm, 1889)

MATERIAL. II -  $1 \circlearrowleft$  (TZ).

NOTES. First recorded for Khabarovskii krai.

# 59. Istochaeta maladerivora (Borisova, 1963)

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 60. Istochaeta rufipes (Villeneuve, 1937)

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 61. Istochaeta subrufipes (Borisova, 1964)

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 62. Istochaeta zimini (Borisova, 1964)

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

### 63. Leiophora innoxia (Meigen, 1824)

NOTES. Recorded for Khabarovskii krai by Kolomiets (1977), but not recorded by Richter (1986, 2004).

# 64. Lixophaga cinerea Yang, 1988

MATERIAL. XII - 1 ♂ (TZ).

NOTES. First record for Russia. The holotype is reported by Yang (1988) from Northeast China, not far from the North Korean border.

#### 65. Lydella stabulans (Meigen, 1824)

MATERIAL. III - 1  $\circlearrowleft$  (TZ).

NOTES. First record for Khabarovskii krai.

# 66. Medina collaris (Fallén, 1820)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 67. Medina luctuosa (Meigen, 1824)

MATERIAL. II -  $\overrightarrow{1}$   $\overrightarrow{0}$  (TZ); IV -  $\overrightarrow{1}$   $\overrightarrow{0}$  (TZ); X -  $2 \Rightarrow$  (TZ); XII -  $1 \Rightarrow$  (TZ).

NOTES. First record for Khabarovskii krai.

#### 68. Meigenia majuscula (Rondani, 1859)

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 69. Meigenia tridentata Mesnil, 1961

NOTES. First recorded for Khabarovskii krai by Richter (1986).

# 70. Meigenia velutina Mesnil, 1952

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 71. Myxexoristops hertingi Mesnil, 1955

MATERIAL. III - 1  $\cite{O}$  (TZ).

NOTES. First record for Khabarovskii krai.

# 72. Nilea innoxia Robineau-Desvoidy, 1863

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 73. Oswaldia apicalis (Mesnil, 1957)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

#### 74. Oswaldia eggeri (Brauer et Bergenstamm, 1889)

MATERIAL. II -  $1 \circlearrowleft$  (TZ).

NOTES. First record for the Russian Far East. Recorded from Japan by Shima (1991).

#### 75. Oswaldia muscaria (Fallén, 1810)

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 76. Pachystylum bremii Macquart, 1848

MATERIAL. XII - 1 3 (TZ).

NOTES. First record for Khabarovskii krai.

#### 77. Pales pavida (Meigen, 1824)

MATERIAL. XII - 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (TZ); XIII - 1  $\circlearrowleft$  (TZ).

NOTES. Recorded for Khabarovskii krai by Richter (1986), however, not mentioned by Richter (2004).

#### 78. Parasetigena silvestris (Robineau-Desvoidy, 1863)

MATERIAL. **XIII** - 1  $\stackrel{\frown}{2}$  (TZ).

NOTES. Recorded for Khabarovskii krai by Kolomiets (1977).

# 79. Parasetigena takaoi (Mesnil, 1960)

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 80. Paratryphera barbatula (Rondani, 1859)

MATERIAL. **XIII** - 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (WvS).

NOTES. First record for Khabarovskii krai. This material in slightly different from the European: in the male, the hairs on tergites 3 are adpressed, except for those on the central axis of the tergite. In European material, all hairs are semierect. The relevance of this difference is currently unclear.

# 81. Paratryphera grandis Ziegler et Shima, 1996

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 82. Phorocera assimilis (Fallén, 1810)

MATERIAL. **X** - 1  $\supseteq$  (TZ); **XII** - 1  $\supseteq$  (TZ); **XIII** - 2  $\supseteq$  (TZ). NOTES. Recorded for Khabarovskii krai by Kolomiets (1977).

#### 83. Phorocera grandis (Rondani, 1859)

NOTES. First recorded for Khabarovskii krai by Richter (2004).

# 84. Phorocera obscura (Fallén, 1810),

MATERIAL. II - 1  $\circlearrowleft$  (XM) [col. ZFMK]; V - 1  $\hookrightarrow$  (TZ); VII - 1  $\circlearrowleft$  (TZ). NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 85. Phorocerosoma vicarium (Walker, 1856)

MATERIAL. XIII - 1 ♂ (WvS).

NOTES. First record for Khabarovskii krai.

# 86. Phryno brevicornis Tachi, 2012

MATERIAL. **III** - 1  $\circlearrowleft$  (TZ); **IX** - 1  $\circlearrowleft$  (WvS); **Boitsovo**, 20 km north Bikin, Shivki Mtn, 27.V 1993, 2  $\circlearrowleft$ , 3  $\circlearrowleft$  (CL, CLJZ) [CJZB & SDEI].

NOTES. First records for Khabarovskii krai. Partly recorded as *Phryno* sp. by Ziegler & Shima (1996). I have revised this material and found it to be partly *Ph. brevicornis* Tachi, 2012, partly *Ph. tenuiforceps* Tachi, 2012 and partly *Ph. koreana* Tachi, 2012.

#### 87. Phryno koreana Tachi, 2012

MATERIAL. V - 1  $\circlearrowleft$  (TZ); **XIII** - 1  $\circlearrowleft$  (TZ); **Boitsovo**, 20 km. north Bikin, Shivki Mtn, 27.V 1993, 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (CL, CLJZ) [CJZB & SDEI].

NOTES. First records for Russia. Partly recorded as *Phryno* sp. by Ziegler and Shima (1996).

# 88. Phryxe magnicornis (Zetterstedt, 1838)

MATERIAL. V - 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (TZ).

NOTES. First record for Khabarovskii krai.

#### 89. Phryxe nemea (Meigen, 1824)

MATERIAL. **IX** - 1  $\supseteq$  (WvS).

NOTES. Recorded for Khabarovskii krai by Kolomiets (1977).

#### 90. Phryxe vulgaris (Fallén, 1810)

MATERIAL. **XII** -  $2 \circlearrowleft (TZ)$ .

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### 91. Phytorophaga nigriventris Mesnil, 1942

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

### 92. Platymyia fimbriata (Meigen, 1824)

MATERIAL. **XII** - 1  $\supseteq$  (TZ).

NOTES. First record for Khabarovskii krai.

#### 93. Prodegeeria japonica (Mesnil, 1957)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

#### 94. Prooppia nigripalpis (Robineau-Desvoidy, 1847)

MATERIAL. V - 2  $\circlearrowleft$ , 1  $\circlearrowleft$  (TZ); XII - 1  $\circlearrowleft$  (TZ).

NOTES. First recorded for Khabarovskii krai by Richter (1981).

#### 95. Prooppia strigifrons (Zetterstedt, 1838)

MATERIAL. **X** - 1  $\supseteq$  (TZ).

NOTES. First record for the Russian Far East.

# 96. Pseudoperichaeta erebiae (Mesnil, 1963)

NOTES. Holotype from Khabarovskii krai (Mesnil, 1963).

#### 97. Pseudoperichaeta nigrolineata (Walker, 1853)

MATERIAL. XII - 1  $\bigcirc$  (TZ).

NOTES. First record for Khabarovskii krai.

# 98. Senometopia excisa (Fallén, 1820)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 99. Senometopia lena (Richter, 1980)

NOTES. First record for the Russian Far East.

#### 100. Smidtia antennalis Shima, 1996

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

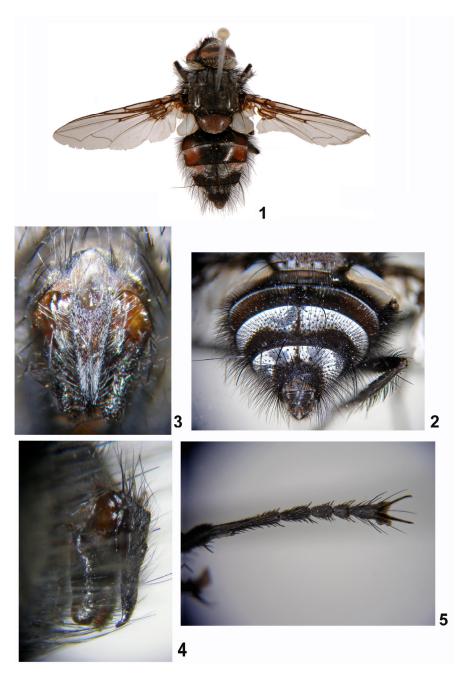
#### 101. Smidtia atribasis Zeegers, sp. n.

Figs 1–5

MATERIAL. Holotype – male, **Russia**: Khabarovskii krai, 18 km WNW Komsomolsk, 50°49' N, 136°57' E, alt. 100 m, bog, 12.VI 2013, leg Th. Zeegers [SDEI]. Paratypes: 1 male, Khabarovskii krai, forest lake near Komsomolsk, 50°40'N, 136°52' E, alt. 100 m, 12.VI 2013, leg Th. Zeegers [CTZS]; 1 male, Khabarovskii krai, Tumnin, 49°40'N, 139°59' E, alt. 300–800 m, hill forest at sanatorium, 14.VI 2013, leg Th. Zeegers [CTZS].

DESCRIPTION. Male (Fig. 1). Length 14 mm.

Vertex as broad as in *S. amoena*: 0,23–0,3 times as broad as one eye. Frontal stripe just before anterior ocellus as broad as parafrontal. Colour of parafrontal shifting with view of angle: largely silvery white in dorsal view (only greyish near ocelli), however, turned dark grey in lateral view. Frontal stripe black, forward strongly broadening, in the middle more than twice as broad as one parafrontal. Inner vertical seta about 1/3th of height of eye, outer vertical setae not or hardly differentiated from postocular setae. Ocellar seta and reclinate orbital seta less strong than inner vertical. Parafacial silvery, relatively broad, as broad as 2/3th of width of third antennal segment, covered by long hairs on upper two-thirds. Gena narrow, 1/5th of height of an eye, covered with long, dense hairs. Occiput behind occipital row with white hairs, on upper half black hairs totally lacking, on lower half with one row of black hairs. Antenna dark, inner side of base of third segment orange. Third antennal segment slightly less than twice as long as second. Palpus yellow on apical half, brown on basal half.



Figs. 1–5. *Smidtia atribasis* sp. n., male. 1 - body, dorsal view; 2 - abdomen, obliquely from behind; 3 - genitalia, dorsal view; 4 - the same, lateral view; 5 - tarsus of fore leg, dorsal view.

Thorax black, dorsum with thin greyish pruinescense leaving 5 dark vittae. Scutellum largely pinkish brown, black on anterior quarter and silvery at apex (best seen from behind). Acrostrichal setae 3+3, dorsocentral 3+4, intra-alar 1+3, 3 katepisternal setae, the anterior two closely together. Scutellum with 4 pairs of marginal setae, apicals crossed, and one pair of strong discal setae. Legs black, pulvilli dull yellow. Claws slightly elongated, about as long as fifth tarsal segment (Fig. 5). Mid tibia with 3–4 ad setae, 2 pd and 1 v. Hind tibia with a comb of regular ad setae, one longer seta only one-quarter stronger than the others. Wing strongly darkened in basal part, dark area consists of the cells cup, bm, br and the area between crossvein R-M, the apex of vein R<sub>1</sub> and wing base. Veins in the darkened area, including crossvein R-M, black (Fig. 1). Section of vein M between crossvein M-Cu and bend short, hardly longer than distance from bend to hind margin of wing and distinctly shorter than fourth section of costa. Calypter white, margin more yellow, halter yellow, tegula and basicosta black.

Abdomen black in ground colour, sides of syntergite 1&2 and tergite 3 chestnut-brown. Pruinescense on tergites 3–5 silvery white, hardly shifting with angle of view. Pruinescense on tergite 3 forming a very narrow anterior band, only slightly broadening towards lateral margin; pruinescense on tergite 4 with M-shaped posterior margin, covered 1/2-3/4 of tergite (Fig. 2). Pruinescense on tergite 5 covering basal, hence apical half black. Tergites with longer, erect hairs, those on syntergite 1&2 and tergite 3 much denser than on tergite 4. Syntergite 1&2 and tergite 3 with a pair of central marginal setae, tergite 4 with a row of marginal setae; discal setae as a rule lacking (present in the Tumnin paratype!).

Male genitalia very similar to those of *S. amoena*, surstylus at apex broader (Figs 3, 4).

Female: unknown.

MEASUREMENTS. Lenght of male body 14 mm, male wing 13 mm.

COMPARISON. Member of the *Smidtia amoena*-complex, most similar to *S. amurensis* (Borisova, 1962) and *S. amoena* (Meigen, 1824). The new species can be distinguished from all other species in the *amoena*-complex, except *S. amurensis* (Borisova, 1962) by the conspicuous darkening of wing base and all except *S. gemina* (Mesnil, 1949) by the palpus darkened at base. *S. amurensis* differs by having black hairs near vertex behind occipital row, a broader gena and the syncercus having parallel margins over much of its length in dorsal view, the surstylis being curved dorsally in lateral view. In *S. gemina*, the palpus is completely black and the vertex broader. In *S. orientalis* (Borisova, 1962), there are more marginal setae on tergite 3 and the syncercus is broadening towards apex. In *S. harai* (Shima, 1996), also found in Khabarovskii krai, the parafrontal is yellow and the syncercus more strongly ventrally bent at apex in lateral view. In *S. amoena* (Meigen, 1824) and *S. laeta* (Mesnil, 1963), the abdominal pattern is different, especially the pruinescense on tergites 3 and 4 is much more extended, though shifting with the angle of view. The reddish sidemarks usually extend to tergite 4, though this might prove variable.

# 102. Smidtia harai Shima, 1996

MATERIAL. XII - 1 3 (TZ).

NOTES. First record for Russia.

# 103. Smidtia japonica (Mesnil, 1957)

MATERIAL. II - 1  $\circlearrowleft$  (TZ) [only 2 sternopleural setae]; XII - 1  $\circlearrowleft$  (TZ) [scutellum dark]; idem 1  $\circlearrowleft$  and 2  $\supsetneq$  [only 2 sternopleural setae].

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996). The material is slightly different from the description by Shima (1996): most specimens have only 2 sternopleural setae. The male genitalia are in complete agreement with Shima (1996). Hence, I consider this material to be variations of *S. japonica*.

# 104. Smidtia laeta (Mesnil, 1963)

MATERIAL. VI - 2  $\stackrel{\wedge}{\bigcirc}$  (TZ); IX - 2  $\stackrel{\wedge}{\bigcirc}$ , 4  $\stackrel{\hookrightarrow}{\bigcirc}$  (WvS); X - 2  $\stackrel{\wedge}{\bigcirc}$  (TZ); XIII - 1  $\stackrel{\wedge}{\bigcirc}$  (TZ).

NOTES. First records for Khabarovskii krai.

#### 105. Smidtia orientalis (Borisova, 1962)

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 106. Smidtia verna (Kocha, 1971)

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 107. Thelyconychia discalis Mesnil, 1957

MATERIAL. III - 1 ♂ (TZ).

NOTES. First record for Russia.

# 108. Thelyconychia solivaga (Rondani, 1861)

MATERIAL. II - 1  $\circlearrowleft$  (TZ); III - 1  $\circlearrowleft$  (TZ).

NOTES. First record for Khabarovskii krai.

# 109. Winthemia cruentata (Rondani, 1859)

MATERIAL. II - 1  $\stackrel{\wedge}{\bigcirc}$  (XM) [col. ZFMK]; V - 1  $\stackrel{\wedge}{\bigcirc}$  (TZ).

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 110. Zenillia libatrix (Panzer, 1798)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### **Subfamily Phasiinae**

# 111. Arcona amuricola Richter, 1988

NOTES. Holotype from Khabarovskii krai (Richter, 1988).

### 112. Cistogaster agata (Zimin, 1966)

MATERIAL. II - 1 3 (TZ).

NOTES. First record for Khabarovskii krai.

# 113. Clairvillia biguttata (Meigen, 1824)

MATERIAL. II - 1  $\circlearrowleft$  (TZ).

NOTES. First record for Khabarovskii krai.

# 114. Cylindromyia brassicaria (Fabricius, 1775)

MATERIAL. XIII - 1 ♂ (WvS).

NOTES. First record for Khabarovskii krai.

# 115. Ectophasia crassipennis (Fabricius, 1794)

MATERIAL. II - 1 3 (TZ).

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 116. Ectophasia rotundiventris (Loew, 1858)

MATÉRIAL. XIII - 2 3 (TZ).

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 117. Eliozeta helluo (Fabricius, 1805),

MATERIAL. III - 1  $\circlearrowleft$  (TZ); IV - 1  $\circlearrowleft$  (TZ); XII - 1  $\circlearrowleft$  (WvS); XIII - 1  $\circlearrowleft$  (TZ).

NOTES. Recorded for Khabarovskii krai by Richter (1986), however, not recorded by Richter (2004).

#### 118. Gymnosoma dolycoridis Dupuis, 1961

MATERIAL. XIII - 1  $\circlearrowleft$  (XM) [col. ZFMK]; same, 1  $\circlearrowleft$  (TZ).

NOTES. First record for Khabarovskii krai.

#### 119. Gymnosoma nitens Meigen, 1824

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### 120. Gymnosoma nudifrons Herting, 1966

MATERIAL. III - 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (TZ); IX - 1  $\circlearrowleft$  (WvS).

NOTES. First records for Khabarovskii krai.

# 121. Gymnosoma rotundatum (Linnaeus, 1758)

MATERIAL. III - 1  $\circlearrowleft$  (TZ).

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 122. Hemyda hertingi Ziegler et Shima, 1996

MATERIAL. V - 1 3 (XM) [col. ZFMK].

NOTES. Recorded for Khabarovskii krai by Richter (2004).

# 123. Hemyda vittata (Meigen, 1824)

NOTES. Recorded for Khabarovskii krai by Richter (1986, 2004).

# 124. Opesia grandis (Egger, 1860)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### 125. Phasia albopunctata (Baranov, 1935)

NOTES. Recorded for Khabarovskii krai by Draber-Mońko (1965).

# 126. Phasia hemiptera (Fabricius, 1794)

MATERIAL. I - 1  $\circlearrowleft$  (TZ); IX - 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (WvS); XIII - 1  $\circlearrowleft$  (TZ). NOTES. Recorded for Khabarovskii krai by Richter (1986).

### 127. Phasia obesa (Fabricius, 1798)

MATERIAL. **XIII** - 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (TZ); same, 1  $\hookrightarrow$  (WvS). NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 128. Phasia pusilla Meigen, 1824

MATERIAL. II -  $1 \circlearrowleft$  (TZ).

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### 129. Phasia rohdendorfi (Draber-Mońko, 1965)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

#### 130. Phasia subcoleoptrata (Linnaeus, 1767)

MATERIAL. **VII** - 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (TZ); **IX** - 6  $\circlearrowleft$  (WvS).

NOTES. First records for Khabarovskii krai.

# 131. Phasia zimini (Draber-Mońko, 1965)

NOTES. Holotype from Khabarovskii krai (Draber-Mońko 1965).

#### 132. Strongygaster globula (Meigen, 1824)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# **Subfamily Tachininae**

# 133. Actia crassicornis (Meigen, 1824)

NOTES. Recorded for Khabarovskii krai by Richter (1993) and Tachi & Shima (1998), however, not mentioned by Richter (2004).

#### 134. Actia pilipennis (Fallén, 1810)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 135. Aphria longilingua Rondani, 1861

NOTES. Recorded for Khabarovskii krai by Richter (1986).

# 136. Chrysosomopsis cf. aurata (Fallén, 1820)

NOTES. Recorded as *Chrysocosmius auratus* Fallén, 1820 for Khabarovskii krai by Richter (1986). The taxon is a complex of species (Zeegers *et al.*, 2016) and the material from the Far East needs to be reviewed.

# 137. Dexiosoma caninum (Fabricius, 1781)

NOTES. Recorded for Khabarovskii krai by Richter (1986).

#### 138. Dicarca fluviatilis Richter, 1993.

NOTES. Paratypes from Khabarovskii krai (Richter, 1993).

#### 139. Eurithia vivida (Zetterstedt, 1838)

MATERIAL. V - 1  $\supseteq$  (TZ).

NOTES. First record for the Russian Far East.

### 140. Fausta inusta Mesnil, 1957

MATERIAL. IX -  $1 \circlearrowleft$  (WvS).

NOTES. First record for Khabarovskii krai.

# 141. Fausta nemorum (Meigen, 1824)

MATERIAL. VII - 1 ♂ (TZ).

NOTES. First record for Khabarovskii krai.

#### 142. Gastroptilops ater Mesnil, 1957

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 143. Germariochaeta clavata Villeneuve, 1937

MATERIAL. **Komsomolsk-na-Amure**, 10.VI 2013, 1  $\circlearrowleft$  (TZ). The specimen was found on a window in a hotel in the city. One leg sampled for DNA analysis by J.O. Stireman.

NOTES. First record for Khabarovskii krai.

# 144. Goniocera dichaeta (Richter, 1993)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

#### 145. Goniocera maxima Richter 1999

NOTES. Holotype from Khabarovskii krai (Richter 1999b).

# 146. Gymnochaeta magna Zimin, 1958

MATERIAL. VIII - 1 3 (XM) [col. ZFMK].

NOTES. First record for Khabarovskii krai.

# 147. Janthinomyia elegans (Matsumura, 1905)

NOTES. Recorded for Khabarovskii krai by Richter (1986), however, not mentioned by Richter (2004).

# 148. Linnaemyia atriventris (Malloch, 1935)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

#### 149. Linnaemyia comta (Fallén, 1810)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

#### 150. Linnaemyia paralongipalpis Chao, 1962

NOTES. Recorded for Khabarovskii krai by Richter (2004).

# 151. Linnaemyia tuberculata Shima, 1986

NOTES. Recorded for Khabarovskii krai by Richter (2004).

#### 152. Loewia latifrons Mesnil, 1973

NOTES. Holotype from Khabarovskii krai (Mesnil, 1973).

# 153. Lypha dubia (Fallén, 1810)

MATERIAL. III - 1  $\circlearrowleft$  (TZ); IV - 1  $\circlearrowleft$  (TZ); IX - 1  $\hookrightarrow$  (WvS).

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 154. Lypha vestita Richter, 1999.

NOTES. Holotype from Khabarovskii krai (Richter, 1999a).

#### 155. Lyphosia barbata (Mesnil, 1957)

MATERIAL. **X** - 1  $\supseteq$  (TZ).

NOTES. First record for Khabarovskii krai.

# 156. Macquartia dispar (Fallén, 1820)

MATERIAL. **V** - 1  $\circlearrowleft$  (TZ); **IX** - 1  $\circlearrowleft$  (WvS).

NOTES. First records for the Russian Far East. This species is very similar to *M. viridana* Robineau-Desvoidy, 1863, which was recorded for the Russian Far East by Ziegler & Shima (1996). The female of *M. dispar* differs from *M. viridana* by the relative short praealar seta. However, the way in which this feature is traditionally formulated (Mesnil, 1972; Tschorsnig & Herting, 1994) is rather cumbersome to use. Much easier is a comparison between the praealar and the anterior notopleural setae: both are equally strong in *M. viridana*, while in *M. dispar*, the praealar is distinctly shorter and thinner.

# 157. Macquartia nudigena Mesnil, 1972

MATERIAL. V - 1  $\circlearrowleft$  (TZ); IX - 4  $\circlearrowleft$  (WvS).

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 158. Mikia tepens (Walker, 1849)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

# 159. Nemoraea japanica (Baranov, 1935)

MATERIAL. **VII** -  $1 \circlearrowleft$  (TZ).

NOTES. First record for Khabarovskii krai.

# 160. Nemoraea pellucida (Meigen, 1824)

NOTES. Recorded for Khabarovskii krai by Kolomiets (1975).

#### 161. Nowickia marklini (Zetterstedt, 1838)

NOTES. Recorded for Khabarovskii krai by Richter (2004).

### 162. Panzeria laevigata (Meigen, 1838)

MATERIAL. VII - 1 ♂ (TZ). NOTES. First record for Khabarovskii krai.

# 163. Panzeria linguacercus Zeegers, sp. n.

Figs 6–13

MATERIAL. Holotype – male, **Russia**: Khabarovskii krai, bridge over Khor River on road to Bikin, 47°52' N, 135°30' E, 18.VI 2013, leg Th. Zeegers [SDEI]. Paratypes: 1 male, Khabarovskii krai, Nanaisky raion, 100 km S Komsomolsk, 48°45' N 135°52' E, mixed forest along road, 9.VI 2013, leg Th. Zeegers [CTZS]; 1 female, Khabarovskii krai, Amur River bank 30 km NNE Komsomolsk, 50°43' N 137°18' E, 10.VI 2013, leg. Th. Zeegers [SDEI].

DESCRIPTION. Male. Very similar to *Panzeria rudis*, differing as follows. Distance between eyes at vertex one-third of width of an eye, nearly twice as large as the distance between posterior ocelli (ocelli included); frontal stripe at narrowest point as broad as distance between posterior ocelli. Parafacial distinctly narrower than width of third antennal segment (hence relatively narrower than in *P. rudis*). Prementum short, less than twice as long as its diameter. Claws of fore tarsus as long as apical tarsal segment. Scutellum darkened on more than basal half. Apical scutellar setae strong, stronger than the discal scutellar setae. Abdomen more elongated (than *P. rudis*): tergite 3 2.5 times as broad (measured at apical margin) as long (measured along central axis); tergite 4 twice (2.0) as broad as long (Fig. 9) [in *P. rudis*: 2.8 and 2.3 times (Fig. 15)]. Marginal setae on syntergite 1&2 set relatively close together, distance between them not larger than the distance between the subapical scutellar setae. Tergite 3 with 2 pairs of irregular central discal setae in front of each other. Tergite 4 with one pair of central discal setae. Tergite 5 with discal setae standing in one transverse row.

Male genitalia. Syncerus in dorsal view tongue-shaped, distinctly broadening towards tip, broadest at 3/4, there nearly 1.5 x as broad as width at narrowest point. Tip of syncercus blunt. Tip of surstylus bent more strongly inwards than in *P. rudis* in dorsal view. Sternite 5 as in all *Panzeria* with a pair of apical lobes, each of them with a small incision, thus creating two secondary lobes. In new species the inner secondary lobe is broader than the outer lobe and about as long (Fig. 11), while in *P. rudis* inner lobe much narrower and longer than other one (Fig. 17).

Female very similar to the female of *P. rudis*. Parafacial narrower than width of third antennal segment (as in the male). Tarsal segments of fore leg hardly broader than those of middle leg; first frontal tarsal segment nearly as long as the combined length of the following three, all segments as long as broad or longer. Genitalia distinctive: both sternite 6 and sternite 7 anteriorly with a pair of black, shining cushion-shaped structures, connected to each other in the middle: posterior to that on

the central axis is a diamond-shaped bare depression. Combined tergite 6+7 slender (more so than in *P. rudis* and *P. laevigata*), strongly arched.

MEASUREMENTS. Lenght of body: male 14, female 12; wing: male 12, female 10 mm.



Figs. 6–13. *Panzeria linguacercus* sp. n. 6 – male body, dorsal view; 7 – the same, lateral view; 8 – male head, dorsal view; 9 – male abdomen, dorsal view; 10 – male genitalia, dorsal view; 11 – the same, latero-dorsal view, focussing apex of sternite 5; 12 – female head, lateral view; 13 – tarsus of fore leg of female, dorsal view.

COMPARISON. Externally, the new species is most similar to *P. rudis*. The most important differences between them are given below.

- 1(2) Male & female: parafacial distinctly narrower than width of third antennal segment (Fig. 12). Male: distance between eyes at vertex 0.33 x as great as width of an eye, nearly twice as great as the distance between posterior ocelli (ocelli included) (Fig. 8); tergite 5 with discal setae arranged in one single row; syncercus from middle broadening towards blunt tip, broadest at 3/4 (Fig. 10). Female: frontal tarsus hardly broader than middle tarsus, each frontal segment as long as broad or longer (Fig. 13); sternite 6 and 7 anteriorly with a pair of black, shining cushions, partly connected, partly separated by a depression .......

#### 164. Panzeria puparum melanopyga (Zimin, 1960)

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 165. Panzeria rudis (Fallén, 1810)

Figs 14-19

MATERIAL. II - 1 
$$\circlearrowleft$$
 (XM) [col. ZFMK]; VI - 1  $\circlearrowleft$ , 2  $\circlearrowleft$  (TZ); V - 2  $\circlearrowleft$  (TZ); VII - 1  $\circlearrowleft$ , 2  $\hookrightarrow$  (TZ); X - 1  $\hookrightarrow$  (TZ); XIII - 1  $\circlearrowleft$  (TZ).

NOTES. First records for Khabarovskii krai. The material shows considerable variation in width of vertex and presence of apical scutellar setae. Some might represent undescribed species. The male genitalia show little variation.

### 166. Pelatachina tibialis (Fallén, 1810)

MATERIAL. **VI** - 1  $\circlearrowleft$  (TZ); **V** - 1  $\circlearrowleft$  (TZ); **IX** - 1  $\supsetneq$  (WvS); **XII** - 1  $\circlearrowleft$ , 1  $\supsetneq$  (WvS).

NOTES. Recorded from Khabarovskii krai by Kolomiets (1975).

# 167. Peleteria adelpha Zimin, 1961

NOTES. Recorded for Khabarovskii krai by Richter (2004).

# 168. Peleteria ferina (Zetterstedt, 1844)

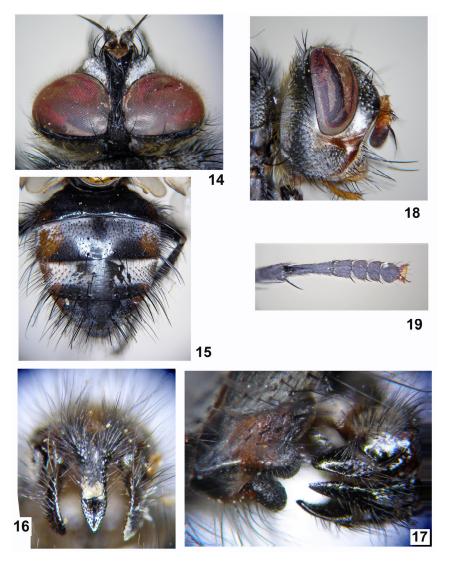
NOTES. Recorded for Khabarovskii krai by Kolomiets (1975).

#### 169. Peleteria pallida Zimin, 1935

NOTES. Recorded for Khabarovskii krai by Zimin (1961).

#### 170. Peleteria propingua (Zimin, 1961)

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).



Figs. 14–19. *Panzeria rudis* from Khabarovskii krai. 14 – male head, dorsal view; 15– male abdomen, dorsal view; 16 – male genitalia, dorsal view; 17 – the same, latero-dorsal view, focussing apex of sternite 5; 18 - female head, lateral view; 19 - tarsus of fore leg of female, dorsal view.

171. Peleteria semiglabra (Zimin, 1961) MATERIAL. II -  $4 \ \$  (TZ, XM). One female has a small interalar seta before the suture.

NOTES. Part of type series from Khabarovskii krai (Zimin, 1961).

#### 172. Phytomyptera amuricola (Richter, 1992)

NOTES. Holotype of Elfia amuricola from Khabarovskii krai (Richter 1992).

#### 173. Siphona boreata Mesnil, 1960

MATERIAL. IX - 4  $\circlearrowleft$ , 2  $\circlearrowleft$  (WvS).

NOTES. First record for Khabarovskii krai.

# 174. Siphona confusa Mesnil, 1961

MATERIAL. **XI** - 1  $\supseteq$  (TZ).

NOTES. First record for Khabarovskii krai.

# 175. Siphona aff. hungarica Andersen 1984

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996), however, not mentioned by Richter (2004).

# 176. Siphona maculata Staeger, 1849

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 177. Siphona pauciseta Rondani, 1865

MATERIAL. **XIII** -  $1 \supseteq (WvS)$ .

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

# 178. Tachina (Servillia) breviceps (Zimin, 1929)

MATERIAL. II - 1  $\supseteq$  (TZ).

NOTES. First recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 179. Tachina (Servillia) aff. luteisquama (Zimin, 1984)

MATERIAL. **IV** -  $1 \circlearrowleft (TZ)$ .

NOTES. So far, this species is only known from the holotype described from Kyrgyzstan. I have not seen this specimen. The identification is tentative.

# 180. Tachina (Servillia) jakovlevi (Portshinksky, 1882)

NOTES. Recorded for Khabarovskii krai by Kolomiets (1975), however, not mentioned by Richter (1986, 2004).

#### 181. Tachina (Servillia) quadrivittata Zimin, 1984

MATERIAL. IX -  $1 \circ (WvS)$ .

NOTES. First record for Khabarovskii krai. The species was described by Zimin in Zimin & Kolomiets (1984) from Amurskaya oblast for the male gender only.

#### 182. Tachina (Servillia) ursina Meigen, 1824

MATERIAL. V - 1  $\circlearrowleft$  (TZ); VI - 1  $\circlearrowleft$  (TZ).

NOTES. First records for Khabarovskii krai.

#### 183. Tachina (Tachina) nupta (Rondani, 1859)

NOTES. Recorded for Khabarovskii krai by Kolomiets (1975).

# 184. Tachina (Tachina) stackelbergiana Herting et Dely-Draskovits, 1993

NOTES. Recorded for Khabarovskii krai by Kolomiets (1975) as *T. stackelbergi* Zimin, however, not mentioned by Richter (1986, 2004).

#### 185. Triarthria setipennis (Fallén, 1810)

MATERIAL. IX - 1  $\circlearrowleft$ , 1  $\circlearrowleft$  (WvS).

NOTES. Recorded for Khabarovskii krai by Ziegler & Shima (1996).

#### 186. Trichoformosomyia notata Richter, 1999.

NOTES. Holotype from Khabarovskii krai (Richter, 1999a).

# LIST OF THE SPECIES ERRONEOUSLY RECORDED FROM KHABAROVSKII KRAI

#### Buquetia musca Robineau-Desvoidy, 1847

NOTES. Recorded for Khabarovskii krai by Richter (1986), but not mentioned by Richter (2004). The species is likely confused with *Buquetia intermedia* and is not considered to occur in Khabarovskii krai.

# Phorinia? breviata Tachi et Shima, 2006

NOTES. Recorded for Khabarovskii krai as *Phorinia aurifrons* Robineau-Desvoidy, 1830 based on one female by Richter (2005). Tachi & Shima (2006) consider records of this species from eastern Asia misidentifications. According to these authors, females cannot be identified reliably.

# Phryno vetula (Meigen, 1824)

NOTES. Recorded for Khabarovskii krai by Richter (1986, 2004). This species does not occur in the Far East (Tachi, 2012). The records likely refer to *Ph. koreana*.

# DISCUSSION

Ziegler & Shima (1996) listed 112 species of Tachinidae for Khabarovskii krai, Richter (2004) listed 115 species. However, those two lists share only 94 species. Hence, the total number of Tachinidae known at the time from Khabarovskii krai was 133. Later, Richter (2005) added one species. To this, this article adds 56 species and removed 3 species, raising the total number of Tachinidae recorded from Khabarovskii krai to 186.

It is obvious that this checklist will be proven incomplete. A relative short trip in 2013 of 10 days raised the number of known Tachinidae species by 42 %. Collecting at other areas of the krai and in other periods of the year will increase the number of species. The number of Tachinidae species recorded for the neighbouring Primorskii

krai is 371 (Ziegler & Shima, 1996; Richter, 2004). This large difference is caused both by the greater richness of the Primorski fauna with a stronger southern influence and by the much more intensive studies in that region. On the other hand, the number of species recorded for the Amurskaya Oblast is much lower, about 111.

The two species described as new to science have not yet been found outside Khabarovskii krai. *Smidtia atribasis* sp. n. belongs to a complex of species which radiated strongly in the Russian Far East and Japan. The closest relative of *Panzeria linguacercus* sp. n. is *P. rudis* with a transpalearctic distribution. Of the remaining four species new to Russia, two were only known from Japan (*Smidtia harai* and *Thelyconychia discalis*) and two from Korea (*Lixophaga cinerea* and *Phryno koreana*). Another nine species are recorded for the first time for the Russian Far East. Of these, *Cyrtophleba vernalis* is first recorded for Asia.

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